

HP StorageWorks

Fibre Channel Disk Drive Replacement Instructions



These instructions apply to the EVA 4000/6000/8000 product family. The part may also be used in other HP products. Please refer to documentation for your specific product for detailed replacement instructions.



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Warranty Information

If the product in which this part is being replaced is still under HP warranty, then the replacement part(s) referred to in these Replacement Instructions is provided under the terms and conditions of the Hewlett-Packard Company Limited Warranty for that product. A copy of this Limited Warranty may be viewed at: <http://h18006.www1.hp.com/products/storageworks/warranty.html>

If this is a trade sale part (product out of warranty), then the replacement part(s) referred to in these Replacement Instructions is provided under HP's express limited warranty statement, which may be viewed at: http://customerops.corp.hp.com/1sw/pdm_om/warranty_support/policies/2330100.doc

The replacement part takes on either the Limited Warranty Period of the part being replaced or a ninety-day period that begins upon installation of the replacement part, whichever is greater.

The only warranty for this replacement product is as noted above. Nothing in these replacement instructions should be construed as constituting an additional warranty. The information provided in these replacement instructions is provided "AS IS" and HP is not liable for technical or editorial errors or omissions contained herein.

1 About This Document

This document describes the procedure for replacing the Fibre Channel disk drive used in the EVA 4000/6000/8000 products.

2 Before you begin

Observe the following precautions when replacing the disk drive.



CAUTION:

Make sure you have a replacement part available before removing the failed component. Removing a component impacts cooling within the enclosure.

Do not remove more than one disk drive at a time from the enclosure. Doing so will impact cooling of the enclosure and may cause data loss.

Parts can be damaged by electrostatic discharge. Use proper anti-static protection. Refer to the documentation that shipped with your system for additional information.

Have a copy of the product User Guide available for reference. You can download a copy of the User Guide from the product support page on the HP web site.


3 Verifying component failure

Before replacing a disk drive, use the following methods to verify the component failure:



CAUTION:

If Command View EVA does not present a status consistent with that of the disk drive status indicators, or if Command View or the System Event Analyzer indicates multiple hardware failures, contact HP support for assistance. The HP support web site is located at <http://www.hp.com/support>

- Analyze any failure messages you may have received from system monitoring (System Event Analyzer).
- Check the disk drive status indicators. See [Figure 1](#). The Fault indicator should be On.
- Check status using Command View EVA:
 - In the Navigation pane, select **Storage system > Hardware > Rack > Disk enclosure > Bay**
 - In the Content pane, select the **Disk Drive** tab. The Operational state should be  Failed .
 - Verify the following status conditions are met before proceeding:
 - Migration state - Not migrating
 - Requested usage - Ungrouped
 - Actual usage - Ungrouped
 - Click **Remove** to prepare the disk for removal. The status indicators on the disk drive will begin flashing to help you locate the disk.

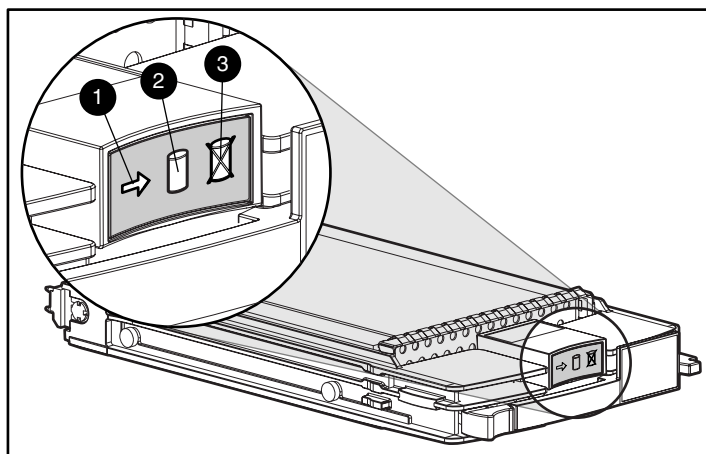


Figure 1 Disk drive status indicators

1. Activity 2. Online 3. Fault

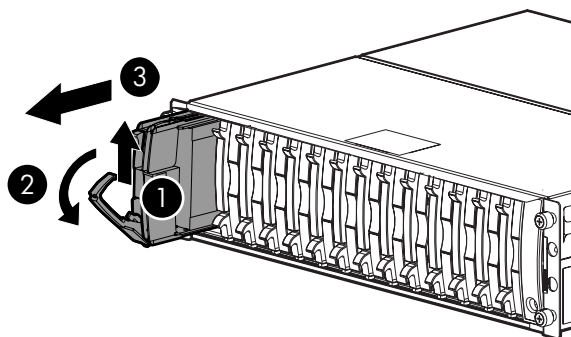
4 Removing a disk



CAUTION:

Rotating media can make the disk drive difficult to handle. To avoid dropping and damaging the disk drive, wait approximately 30 seconds for the media to stop rotating before removing the drive from the enclosure.

- Push in the wine-colored ejector button (1) and pull the release lever (2) down to the full open position.
- Pull the disk drive part way out of the enclosure (3) and wait for the media to stop spinning.
- When the media has stopped spinning, remove the disk drive from the enclosure.

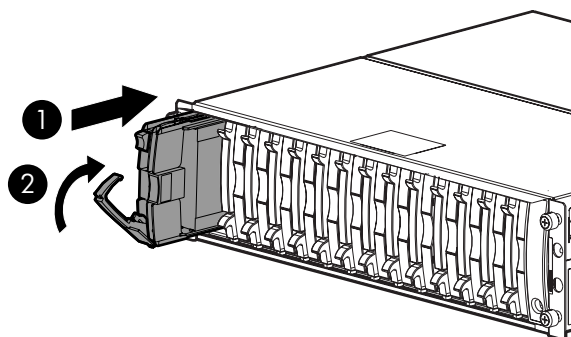


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Figure 2 Removing a disk drive

5 Installing a disk drive

- Push in the ejector button on the disk drive and pull the release lever down to the full open position.
- Insert the drive into the enclosure as far as it will go (1).
- Close the release lever until it engages the ejector button, and the disk drive seats in the backplane (2).
- Press in firmly on the disk drive to ensure it is seated properly.



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Figure 3 Installing a disk drive


6 Verifying proper operation

After replacing the disk drive, check the following to verify that the disk drive is operating normally:



NOTE:

It may take up to 10 minutes for the component to display good status.

- Check the disk drive status indicators. See [Figure 1](#).
 - Activity indicator (1) should be on or flashing
 - Online indicator (2) should be on or flashing
 - Fault indicator (3) should be off
- Check the following using Command View EVA.
 - Navigate back to the component and check the operational state. It should be 
 - Ensure the disk drive is using the correct firmware. Check the **Firmware Version** against the supported disk firmware in the *HP StorageWorks Enterprise Virtual Array Release Notes*. The most current edition of the release notes can be downloaded from the following web site: <http://www.hp.com/go/eva8000>
If the disk drive is using an unsupported version of firmware, contact HP support for assistance. Do not add the disk drive to a disk group if it using an unsupported firmware version.

7 Adding the disk to a disk group

After replacing the disk, it should be added to a disk group. The disk is typically added back into its original disk group.

1. In the Navigation pane, select **Storage system > Hardware > Rack > Disk enclosure > Bay**
2. In the Content pane, select the **Disk Drive** tab.
3. Click **Group** to initiate the process for adding the disk to a disk group.



NOTE:

If the Device Addition Policy is set to automatic, the disk will automatically be added to a disk group. In this case the **Group** option will not be available.

8 Returning the failed component

Please follow the return instructions provided with the new component.